

**WHAT IS CLAIMED IS:**

1. A thin film transistor array panel for a liquid crystal display, comprising:

a gate wire including gate lines formed in a horizontal direction;

a storage wire including storage electrode lines formed in the same direction as the gate lines, storage electrodes connected to the storage electrode lines, and at least one storage electrode connection portion connecting the storage electrodes of a neighboring pixel;

a data wire including data lines formed in a vertical direction, wherein said data wire intersects and is insulated from said storage wire and said gate wire;

a pixel electrode formed in a pixel defined by an intersection of the gate line and the data line, wherein said pixel electrode forms a storage capacitor by overlapping the storage wire, and receives image signals through the data line; and

a redundant repair line that overlaps and is insulated from the storage wire at one end and overlaps the storage wire or the gate wire of a neighboring pixel at the other end.

2. The thin film transistor array panel of claim 1, further comprising a storage wire connection portion connecting storage wires of neighboring pixels.

3. The thin film transistor array panel of claim 2, wherein the storage wire connection portion is formed of the same layer as said pixel electrode.

4. The thin film transistor array panel of claim 1, wherein said

redundant repair line is formed of the same layer as said data wire.

5. The thin film transistor array panels of claim 1, wherein said storage wires are formed of the same layer as said gate wire.

6. A thin film transistor array panel for a liquid crystal display, comprising:

- an insulating substrate;

- a gate wire formed on the insulating substrate, wherein said gate wire includes a gate line formed in a horizontal direction and transmitting a scanning signal, and a gate electrode connected to the gate line;

- a storage wire formed on the insulating substrate, wherein said storage wire includes a storage electrode line formed in a direction parallel to the gate line, a storage electrode connected to the storage electrode line, and at least one storage electrode connection portion connecting storage electrodes of neighboring pixels;

- a gate insulating layer covering said gate wire and said storage wire.

- a semiconductor layer formed on the gate insulating layer and made of semiconductor material;

- a data wire including a data line formed in a vertical direction, a source electrode connected to the data line and extended on the semiconductor layer, and a drain electrode extended on the semiconductor layer and separated from the source electrode with respect to the gate electrode, wherein the data line defines a pixel by intersecting the gate line;

- a redundant repair line on said gate insulating layer that is insulated

from the storage wire at one end and that overlaps said storage wire or said gate wire of a neighboring pixel at the other end;

a passivation layer covering said data wire and said redundant repair line; and

a pixel electrode electrically connected to the drain electrode through the first contact hole.

7. The thin film transistor array panel of claim 6, wherein data wire is formed on said gate insulating layer.

8. The thin film transistor array panel of claim 7, wherein said pixel electrode is formed on said passivation layer and connected to the drain electrode through a contact hole of said passivation layer.

9. The thin film transistor array panel of claim 6, further comprising a storage wire connection portion formed on said passivation layer,

wherein the storage wire connection portion connects the storage wires of neighboring pixels through a contact hole of the passivation layer and the gate insulating layer.

10. A method for repairing a severed gate wire of a thin film transistor array panel for a liquid crystal display, wherein the thin film transistor array panel for a liquid crystal display has a gate wire including a gate line formed in a particular direction, a storage wire including a storage electrode line formed in the same direction as the gate line, a storage electrode connected to the storage electrode line and at least one of storage electrode connection portions connecting storage electrodes of neighboring pixels, a data wire including a

data line formed in a direction approximately perpendicular to the gate line and intersecting while insulated from the gate wire and the storage wire, a pixel electrode formed in a pixel defined by the intersection of the gate line and the data line, forming a storage capacitor by overlapping the storage wire, and receiving image signals through the data line, and a redundant repair line that overlaps and is insulated from the storage wire at one end and overlaps the storage wire or the gate wire of a neighboring pixel at the other end, comprising the steps of:

shorting the severed gate line and the storage wire and the redundant repair lines overlapping the severed gate line and the storage wire.

11. A method for repairing a severed data wire of a thin film transistor array panel for a liquid crystal display, wherein the thin film transistor array panel for a liquid crystal display has a gate wire including a gate line formed in a particular direction, a storage wire including a storage electrode line formed in the same direction as the gate line, a storage electrode connected to the storage electrode line and at least one of storage electrode connection portions connecting storage electrodes of neighboring pixels, a data wire including a data line formed in a direction approximately perpendicular to the gate lines and intersecting while insulated from the gate wire and the storage wire, a pixel electrode formed in a pixel defined by the intersection of the gate line and the data line, forming a storage capacitor by overlapping the storage wire, and receiving image signals through the data line, and a redundant repair line that overlaps and is insulated from the storage wire at one end and overlaps the

storage wire or the gate wire of a neighboring pixel at the other end, comprising the steps of:

shorting the severed data line and the storage wire overlapping the severed data line.

12. A method for repairing a data wire of a thin film transistor array panel for a liquid crystal display when a source electrode is severed from the data line, wherein the thin film transistor array panel for a liquid crystal display having a gate wire including a gate line formed in a particular direction, a storage wire including a storage electrode line formed in the same direction as the gate line, a storage electrode connected to the storage electrode line and at least one of storage electrode connection portions connecting storage electrodes of neighboring pixels, a data wire including a data line formed in a direction approximately perpendicular to the gate line and intersecting while insulated from the gate wire and the storage wire, a pixel electrode formed in a pixel defined by intersection of the gate line and the data line, forming a storage capacitor by overlapping the storage wire, and receiving image signals through the data line, and a redundant repair line that overlaps and is insulated from the storage wire at one end, and overlaps the storage wire or the gate wire of a neighboring pixel at the other end, comprising, the steps of:

shorting the storage wire and the redundant repair line neighboring the severed source electrode; and

shorting the shorted storage wire and the severed data line.

13. A method for repairing wires of a thin film transistor array panel for

a liquid crystal display when a source electrode is severed from a data line,

wherein the thin film transistor array panel for a liquid crystal display has a gate wire including a gate line formed in a particular direction, a storage wire including a storage electrode line formed in the same direction as the gate line, a storage electrode connected to the storage electrode line and at least one of storage electrode connection portions connecting storage electrodes of neighboring pixels, a data wire including a data line formed in a direction approximately perpendicular to and intersecting while insulated from the gate wire and the storage wire, a pixel electrode formed in a pixel defined by intersection of the gate line and the data line, forming a storage capacitor by overlapping the storage wire, and receiving image signals through the data line, a redundant repair line that overlaps and is insulated from the storage wire at one end and overlaps a storage wire or a gate wire of a neighboring pixel at the other end, and a storage wire connection portion connecting storage wires of a neighboring pixel column, comprising

the steps of:

shorting the storage wire neighboring the severed source electrode and the severed data line.

14. A thin film transistor array panel for a liquid crystal display, comprising:

an insulating substrate;

a gate line formed on said insulating substrate in a horizontal direction

and including a gate electrode;

a common electrode line formed between two neighboring gate lines;  
a common electrode electrically connected to said common electrode line and formed in a vertical direction;  
a data wire formed in a vertical direction and intersecting said gate line;  
a semiconductor layer on and insulated from said gate line;  
a source electrode connected to said data wire and extended on said semiconductor layer;  
a drain electrode extended on said semiconductor layer and separated from source electrode;  
a pixel electrode electrically connected to said drain electrode and formed in parallel and alternately with the common electrodes; and  
a redundant repair line simultaneously overlapping said common electrode line and said gate line.

15. The thin film transistor array panel of claim 14, wherein said common electrode line is formed in duplicate, and said redundant repair line overlaps one of the duplicate common electrode lines.

16. The thin film transistor array panel of claim 14, wherein said common electrode line has duplicate wires including a first wire and a second wire, and said redundant repair line simultaneously overlaps the first wire and the second wire located at both sides of said gate line.

17. The thin film transistor array panel of claim 14, further comprising a first connection portion extended to said common electrode line, a sub common electrode line connecting said common electrode as one body and connected to

the first connection portion, a pixel electrode line extended from the drain electrode and overlapping said common electrode line, a second connection portion extended from the pixel electrode line and overlapping the first connection portion, and a sub pixel electrode line connecting said pixel electrode as one body and overlapping the sub common electrode line.

18. The thin film transistor array panel of claim 14, wherein said data wire includes a redundant data line, and a data line connected through a contact hole of an interlayer insulating layer formed between the data line and the redundant data line.

19. The thin film transistor array panel of claim 18, wherein the redundant repair line is formed of the same layer as the redundant data line.

20. The thin film transistor array panel of claim 18, wherein the redundant repair line is formed of the same layer as the data line.